

Application No.: 10/790,723Docket No.: 2336-247REMARKS

The Examiner's indication of allowable subject matter of claim 6 is noted with appreciation.

Claims 1-11 and 23-33 are pending in the application. Claims 12-22 have been cancelled without prejudice or disclaimer. Original claims 1-10 remain unchanged notwithstanding the Examiner's art rejections. New claims 23-33 have been added to provide Applicants with the scope of protection to which they are believed entitled. The new claims find solid support in the original specification and the original drawings. The Abstract has been revised to be compliant with commonly accepted US patent practice. No new matter has been introduced through the foregoing amendments.

The Examiner's decision to sustain the Restriction Requirement and withdraw the non-elected claims from consideration is noted. The Examiner argues that additional examination burden would be imposed if the Restriction Requirement was lifted. The Examiner's argument is not persuasive, because in the outstanding Office Action, the Examiner has demonstrated his ability to search across multiple classes and subclasses for prior art used in his art rejections without serious burden.

In particular, Applicants note that none of the applied references are classified in the class/subclass of the elected invention, i.e., 257/774. See the Restriction Requirement mailed February 25, 2005 at page 2, paragraph I, Form PTO-892 attached to the outstanding Office Action, and the front page of the primary reference of *Chang et al.* which is classified in class 357.

Applicants further note that all but one of the cited references are classified in the same class as the non-elected invention, i.e., class 438. See Form PTO-892 attached to the outstanding Office Action and the Restriction Requirement mailed February 25, 2005 at page 2, paragraph II.

Accordingly, Applicants respectfully submit that the outstanding Office Action and attached

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Form PTO-892 are evidence that the Examiner is able to search for and apply references classified in the field of one invention (i.e., the non-elected invention) against the claims directed to the other invention (i.e., the elected invention). Thus, the Examiner's has demonstrated that the search and examination of the entire application can be done without serious burden. In view of the above, withdrawal of the Restriction Requirement and consideration of all claims, including the non-elected claims, are now believed appropriate and therefore respectfully requested.

The 35 U.S.C. 103(a) rejections of claims 1-11 as being obvious over *Chang et al.* in view of the teaching references are traversed, because the reference of *Chang et al.* is non-analogous art that cannot be applied against the claims of the instant application in an obviousness rejection.

"In order to rely on a reference as a basis for rejection of an applicant's invention [under 35 U.S.C. 103(a)], the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986); *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992) ("A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem."); and *Wang Laboratories Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993). See MPEP, section 2141.01(a).

Applicants respectfully submit that *Chang et al.* is not in the field of applicant's endeavor, as can be seen from the completely different classifications of *Chang et al.* (i.e., class 357) and the invention (i.e., class 257). See the Restriction Requirement mailed February 25, 2005 at page 2, paragraph I, and the front page of the primary reference of *Chang et al.* which is classified in class 357.

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Applicants further submit that the *Chang et al.* reference is not reasonably pertinent to the particular problem with which the inventor was concerned. The problems with which the inventors was concerned include simplifying the processing of the cap structure and providing a complete air-tight wafer-level package. See the specification at page 5, lines 12-17. The matters with which *Chang et al.* deal are the problems of a metallized tape that does not have the pins protruding therethrough in order to facilitate interconnection between the metallized tape and the terminal pins and is not encapsulated by the plastic but rather adhesively bonded thereto with the edges of the circuit being disadvantageously exposed to the environment. See *Chang et al.* at column 2, lines 37-43. Applicants respectfully submit that a person of ordinary skill in the art would understand that the *Chang et al.* technical solution that includes improving electrical contact between the tape and the pins and protecting the exposed edges of the circuit by an encapsulating material would not have recommended itself to the inventor's attention in considering the completely different problems of simplifying the structure of the cap and enhancing the air-tightness of the wafer-level package. Thus, *Chang et al.* is not reasonably pertinent to the particular problem with which the inventor was concerned.

Accordingly, *Chang et al.* is non-analogous art and the 35 U.S.C. 103(a) rejection relying on *Chang et al.* is inappropriate and should be withdrawn.

Of particular note, the teaching references of *Gan et al.* and *Nagarajan et al.* disclose a structure having a cap wafer having via connectors and a device wafer having a micro device. The teaching references therefore teach the same conventional structure with via connectors formed in the cap, as discussed at the Background section and shown in FIG. 2 of the instant application. In contrast, the claimed invention requires that the via connectors be formed in the device wafer, rather than the cap wafer. Therefore, the invention of claims 1-10 is patentable over the teaching references.

New claims 23-28 depend from claim 1, and are considered patentable at least for the

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reason advanced with respect to claim 1. Claims 23-28 are also patentable on their own merits since these claims recite other features of the invention neither disclosed, taught nor suggested by the applied art.

As to claim 23, the applied references, especially *Chang et al.*, *Gan et al.* and *Nagarajan et al.*, clearly fail to teach or suggest that the micro device is positioned between two cavities.

As to claim 24, the applied references, especially *Gan et al.* and *Nagarajan et al.*, do not fairly teach or suggest that the micro device is a film bulk acoustic resonator (FBAR).

As to claim 25, the applied references, especially *Chang et al.*, *Gan et al.* and *Nagarajan et al.*, clearly fail to teach or suggest that the bonding pads are completely located in said cavity.

As to claim 26, the applied references, especially *Chang et al.*, *Gan et al.* and *Nagarajan et al.*, clearly fail to teach or suggest that an entirety of each of the bonding pads is inwardly spaced from a closest one of said side walls.

As to claim 27, the applied references, especially *Nagarajan et al.*, clearly fail to teach or suggest that the dry film structure is photosensitive. The Examiner reads element 352 of *Nagarajan et al.* on the claimed dry film structure. However, element 352 of *Nagarajan et al.* is a cap wafer (column 7, line 32) and, as well known in the art, wafers are not made of photosensitive material.

As to claim 28, the applied references, especially *Nagarajan et al.*, clearly fail to teach or suggest that the passivation layer covers outer peripheral portions of the surface of the device wafer that is bonded to the cap structure. This feature finds support in FIG. 6d of the instant application. The Examiner reads element 356 of *Nagarajan et al.* on the claimed passivation layer. However, element 356 of *Nagarajan et al.* is not formed on or covers the upper surface of device wafer 372 as presently claimed. See e.g., FIG. 3G of *Nagarajan et al.*

New independent claim 29 is patentable over the applied art of record, because the art

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clearly fails to teach or suggest at least the claim limitation that the internal bonding pads are completely located within said cavity. For example, as can be seen in FIG. 3E of *Chang et al.*, the outermost portions of binding pads 88 are not located in cavity 86.

Claims 30-33 depend from claim 29, and are considered patentable at least for the reason advanced with respect to claim 29. Claims 30-33 are also patentable on their own merits since these claims recite other features of the invention neither disclosed, taught nor suggested by the applied art, as will be apparent to the Examiner upon reviewing these claims.

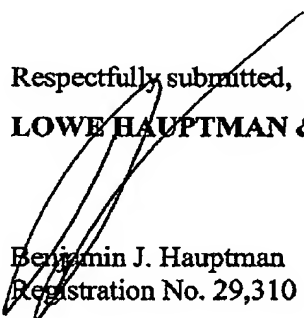
Each of the Examiner's rejections has been traversed. Accordingly, Applicants respectfully submit that all claims are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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